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REPORT OF THE WORKING GROUP ON ELECTRONIC DATA INTERCHANGE (EDI) ON THE WORK OF ITS TWENTY-SEVENTH SESSION
(New York, 28 February-11 March 1994)

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INTRODUCTION

1. At its twenty-fourth session (1991), the Commission agreed that the legal issues of electronic data interchange (EDI) would become increasingly important as the use of EDI developed and that the Commission should undertake work in that field. The Commission agreed that the matter needed detailed consideration by a Working Group. [1/]

2. Pursuant to that decision, the Working Group on International Payments devoted its twenty-fourth session to identifying and discussing the legal issues arising from the increased use of EDI. The report of that session of the Working Group suggested that the review of legal issues arising out of the increased use of EDI had demonstrated that among those issues some would most appropriately be dealt with in the form of statutory provisions (A/CN.9/360, para. 129). As regards the possible preparation of a standard communication agreement for world-wide use in international trade, the Working Group decided that, at least currently, it was not necessary for the Commission to develop a standard communication agreement. However, the Working Group noted that, in line with the flexible approach recommended to the Commission concerning the form of the final instrument, situations might arise where the preparation of model contractual clauses would be regarded as an appropriate way of addressing specific issues (ibid., para. 132). The Working Group reaffirmed the need for close cooperation between all international organizations active in the field. It was agreed that the Commission, in view of its universal membership and general mandate as the core legal body of the United Nations system in the field of international trade law, should play a particularly active role in that respect (ibid., para. 133).

3. At its twenty-fifth session (1992), the Commission considered the report of the Working Group on International Payments on the work of its twenty-fourth session (A/CN.9/360). In line with the suggestions of the Working Group, the Commission agreed that there existed a need to investigate further the legal issues of EDI and to develop practical rules in that field. It was agreed, along the lines suggested by the Working Group, that, while some issues would most appropriately be dealt with in the form of statutory provisions, other issues might more appropriately be dealt with through model contractual clauses. After discussion, the Commission endorsed the recommendation contained in the report of the Working Group (ibid., paras. 129-133), reaffirmed the need for active cooperation between all international organizations active in the field and entrusted the preparation of legal rules on EDI to the Working Group on International Payments, which it renamed the Working Group on Electronic Data Interchange. [2/]

4. At its twenty-sixth session (1993), the Commission had before it the report of the Working Group on Electronic Data Interchange on the work of its twenty-fifth session (A/CN.9/373). The Commission expressed its appreciation for the work accomplished by the Working Group. The Commission noted that the Working Group had started discussing the content of a uniform law on EDI and expressed the hope that the Working Group would proceed expeditiously with the preparation of that text.

5. It was suggested that, in addition to the work currently under way in the Working Group, there existed a need for considering particular issues that arose out of the use of EDI in some specific commercial contexts. The use of EDI in procurement and the replacement of paper

bills of lading or other documents of title by EDI messages were given as examples of topics that merited specific consideration. It was also suggested that the Commission should set a time-limit for the completion of its current task by the Working Group. The widely prevailing view, however, was that the Working Group should continue to work within its broad mandate established by the Commission. It was agreed that, only after it had completed its preparation of general rules on EDI, the Working Group should discuss additional areas where more detailed rules might be needed. [3/]

6. The Working Group on Electronic Data Interchange held its twenty-sixth session at Vienna, from 11 to 22 October 1993. At that session, the Working Group considered the issues discussed in a note by the Secretariat (A/CN.9/WG.IV/WP.57) and a proposal made by the delegation of the United Kingdom of Great Britain and Northern Ireland (A/CN.9/WG.IV/WP.58). The Secretariat was requested to prepare, on the basis of the deliberations of the Working Group, a set of revised articles, with possible variants, on the issues discussed.

7. The Working Group on Electronic Data Interchange, which was composed of all States members of the Commission, held its twenty-seventh session in New York, from 28 February to 11 March 1994. The session was attended by representatives of the following States members of the Working Group: Argentina, Austria, Bulgaria, Cameroon, Canada, Chile, China, Denmark, Egypt, France, Germany, Hungary, India, Iran (Islamic Republic of), Italy, Japan, Kenya, Mexico, Morocco, Nigeria, Poland, Russian Federation, Saudi Arabia, Singapore, Slovakia, Spain, Sudan, Thailand, Togo, Uganda, United Kingdom of Great Britain and Northern Ireland, United States of America and Uruguay.

8. The session was attended by observers from the following States: Algeria, Australia, Bahrain, Bolivia, Czech Republic, Côte d'Ivoire, Finland, Indonesia, Myanmar, Pakistan, Panama, Philippines, Republic of Korea, Senegal, Sierra Leone, Sweden, Switzerland, Turkey, Ukraine and Zambia.

9. The session was attended by observers from the following international organizations: Economic Commission for Europe (ECE), United Nations Conference on Trade and Development (UNCTAD), Asian-African Legal Consultative Committee (AALCC), European Community (EC), Hague Conference on Private International Law, Cairo Regional Centre for International Commercial Arbitration, Federación Latinoamericana de Bancos (FELABAN), International Chamber of Commerce (ICC), Organization of Islamic Capitals and Cities (OICC) and Society for Worldwide Interbank Financial Telecommunication (SWIFT).

10. The Working Group elected the following officers:

Chairman: Mr. José-María Abascal Zamora (Mexico);

Rapporteur: Mr. Abdolhamid Faridi Araghi (Islamic Republic of Iran).

11. The Working Group had before it the following documents: provisional agenda (A/CN.9/WG.IV/WP.59) and a note by the Secretariat containing a revised draft of uniform rules on the legal aspects of electronic data interchange (EDI) and related means of data communication (A/CN.9/WG.IV/WP.60).

12. The Working Group adopted the following agenda:

1. Election of officers;

2. Adoption of the agenda;

3. Uniform rules on the legal aspects of electronic data interchange (EDI) and related means of data communication;

4. Other business;

5. Adoption of the report.

I. DELIBERATIONS AND DECISIONS

13. The Working Group discussed draft articles 1 to 10 as set forth in the note by the Secretariat (A/CN.9/WG.IV/WP.60).

14. The deliberations and conclusions of the Working Group are set forth below in chapter II. The Secretariat was requested to prepare, on the basis of those deliberations and conclusions, a set of revised articles, to implement the decisions and conclusions of the Working Group.

II. CONSIDERATION OF DRAFT PROVISIONS FOR UNIFORM RULES ON THE LEGAL ASPECTS OF ELECTRONIC DATA INTERCHANGE (EDI) AND RELATED MEANS OF DATA COMMUNICATION

General remarks

15. The Working Group noted with interest an observation that was made concerning the appearance of common, EDI-related issues in a number of areas of possible future work by the Commission. A specific example cited was the mechanism of a "registry", which might come to be a technique used to support international-trade-law-based solutions in diverse areas such as assignment of claims, securities transactions and paperless negotiable instruments, including documents of title. It was suggested that one response to this phenomenon by the Commission might be to formulate a general legal framework for registries. It was noted that the Working Group might wish to consider this question in the context of further deliberations on possible other issues to be dealt with upon the completion of its current work (see below, paras. 154-160). Such other issues might also include the preparation of a model communication agreement and questions related to the liability of third-party service providers.

Title

16. The reference in the title to "uniform rules" gave rise to a review by the Working Group of its earlier decision to formulate a legal text in the form of statutory rules (A/CN.9/387,

para. 2). It was widely agreed that the term "uniform rules" was inappropriate as it suggested a legal instrument in the nature of contractual rules of practice, when what was needed was statutory support of the practice of EDI. As to the exact form of the statutory rules, a decision that had previously been deferred, the Working Group expressed a preference for the form of a model law. It did so in view in particular of the complexity and time involved in formulating and implementing an international convention, difficulties that were disadvantageous in view of the urgent need for statutory rules in this area.

17. While it was agreed that the form of the text should be that of a model law, and that this needed to be indicated clearly in the title, it was widely felt that, owing to the special nature of the legal text being prepared, a more flexible term than "model law" needed to be found. It was observed that a more flexible term was needed in order to reflect that the text contained a variety of provisions relating to existing rules scattered throughout various parts of different national laws in a typical enacting State. It was thus a possibility that enacting States would not necessarily incorporate the text as a whole and that the provisions of the model law would not necessarily appear together in any one particular place in the national law. The text could be described, in the parlance of one legal system, as a "miscellaneous statute amendment act". The Working Group agreed that this special nature of the text would be better reflected by the use of the term "model statutory provisions". The view was also expressed that the nature and purpose of the model statutory provisions could be explained in an introduction or guidelines accompanying the text.

18. A number of misgivings were expressed as to the remainder of the title. They included: discomfort with the words "the legal aspects", which were described as being too vague for the title of a legislative text and, alternatively, were said to create the mistaken impression that the text dealt with all the legal issues that might be related to the use of EDI; the use of the word "data", which might be suitable for the informal discussions of the Working Group, but was said to be too narrow and unclear to be included in a legal text (see below, para. 46); the use of the word "communication", which was felt to be too narrow and appeared to prejudge decisions still to be made by the Working Group as to the scope of the model statutory provisions; the possible inadequacy of the reference at the end of the title to "related means of data communication"; and the potentially broad scope of transactions and activities to which the words "data communication" could be understood to refer.

19. Various proposals were made aimed at addressing those concerns, while reflecting the common understanding that the title should take into account various possible technologies and combinations of technologies, along with the essential element of durable recording. Those proposals included the use of expressions such as: "data recording"; "computer-based records in commerce"; "electronic commerce"; "exchange of electronic documents"; "using non-paper-based technologies"; "paperless recording and communication of information".

20. Following deliberations, the Working Group was of the view that it would not be possible to fix a final formulation of the title until the content of the model statutory provisions, in particular the provisions relating to scope, had been considered and developed further. It was noted that, for the purposes of a working title, the term "electronic commerce" might be used, though it was observed that the use of the term "commerce" in the title raised questions relating to the scope of application of the model statutory provisions (see below, paras. 22-27).

CHAPTER I. GENERAL PROVISIONS

Article 1. Sphere of application

First sentence

21. The Working Group discussed whether the words between square brackets ("commercial and administrative") should be retained. With respect to the reference to "administrative information", it was generally felt that the model statutory provisions should not expressly deal with the situations where a form requirement was prescribed by an administration for reasons of public policy. It was thus decided that the reference to "administrative information" should be deleted. A view was expressed that the text should contain express wording excluding administrative information from the scope of the model statutory provisions. The Working Group, however, reaffirmed the decision made at its previous sessions that the sphere of relationships between EDI users and public authorities should not be excluded from the scope of the model statutory provisions (A/CN.9/373, para. 48 and A/CN.9/387, para. 35).

22. Divergent views were expressed with respect to the use of the notion of "commercial information". One view was that the model statutory provisions should somehow be limited in scope to data created, stored or exchanged for the purposes of commercial transactions. It was stated that such a limitation would appropriately reflect the general mandate of the Commission with respect to international trade law. It was considered, however, that the reference to the notion of "commercial information" might make it necessary to define that notion in the model statutory provisions. Suggestions were made to provide such a definition either by listing certain types of transactions as "commercial transactions" or by listing certain types of parties as "merchants". It was widely felt that either of those two approaches might raise difficulties in the context of an international instrument since existing national laws might differ as to which types of transactions would be regarded as "commercial" and which types of parties would be regarded as conducting a "commercial" activity. In that connection, it was suggested that, even if the model statutory provisions were generally limited in scope to "commercial information", a provision might be needed to make them applicable to certain data and transactions that might not be regarded as commercial, for example medical data, and to certain categories of professionals that might not be regarded, in many legal systems, as merchants.

23. The contrary view was that any reference to "commerce" or "trade" should be avoided. In support of that view, it was stated that such a reference might raise difficulties, since certain common-law countries, as well as certain civil-law countries, did not have a discrete body of commercial law, and it was not easy or usual in such countries to distinguish between the legal rules that applied to "trade" transactions and those that applied more generally. Other examples were given of countries where the notion of "trade" was not commonly used and might raise a question as to its definition. On the other hand, examples were also given of countries where the notion of "trade" might be already in use in national legislation and might be interpreted differently according to the country in which the notion was used. It was stated that previous UNCITRAL legal texts had avoided unnecessary references to such notions as "trade" or "commerce", while the UNCITRAL Model Law on International Commercial Arbitration, which contained such references, also provided a definition of the term "commercial". It was recalled that the same concern had been expressed at the previous session of the Working Group (A/CN.9/387, para. 34).

24. In favour of deletion of any reference to "commercial information", it was also stated that the focus of the model statutory provisions should not be on any specific category of transactions, e.g., commercial transactions in the context of which various computer-based techniques might be used, but rather that it should be on those techniques themselves, whose common feature was that they were not paper-based. It was thus suggested that the text should contain a reference to "paperless creation, recording and communication of information".

25. It was further stated that, should the model statutory provisions apply only to commercial transactions, such a limitation in scope would be inconsistent with the broad formulation of draft articles 6 to 9, which were intended to provide alternative ways of complying with existing requirements of national law. It was suggested that the scope of the model statutory provisions should cover the full scope of such national requirements, not all of which were intended to apply in a commercial context. For example, it was stated that, in certain jurisdictions, there existed mandatory requirements that all guarantees be established in writing. It was stated that a distinction between "commercial" and "non-commercial" guarantees, cutting across such a legal regime, would establish an unnecessary dichotomy. Another suggestion was made that the scope of the model statutory provisions should cover all kinds of relationships under which parties were free to determine their contractual rights and obligations, to the exclusion of relationships where such rights and obligations were determined by mandatory rules of law.

26. The view was expressed that, should the reference to "commercial information" be deleted, the text might need to be reworked so as not to result in a mere reference to the notion of "data [record] [message]" as defined under draft article 2 (a). Several alternative wordings were proposed for the first sentence. Such proposed wordings included: "These Rules apply to electronic information in the form of data or messages"; "These Rules apply to information related to transactions"; and "These rules apply to computer-based transactions intended to have legal effect". With respect to the proposed reference to the notion of "transaction", it was recalled that the Working Group had agreed at previous sessions that the focus of the model statutory provisions was on data messages or records and not on the underlying transaction.

27. While considerable support was expressed in favour of deletion of any reference to "commercial information", the Working Group decided that the reference should be maintained in square brackets and that the discussion should be reopened at a later meeting, after the substantive model statutory provisions had been reviewed.

Second sentence

28. The Working Group discussed whether the second sentence of draft article 1, stating that the model statutory provisions "do not apply to purely oral or purely [documentary] [written] information" should be retained.

29. It was stated that the meaning of both the terms "written" and "documentary" was not sufficiently clear. The term "paper-based information" was suggested as an alternative. It was pointed out, however, that that term might not encompass certain forms in which information might appear, which should be excluded from the scope of application of the model statutory provisions, such as microfiche. It was therefore suggested that a reference to "digitalized information", i.e., information that could be processed by means of a computer, would be preferable.

30. The prevailing view, however, was that the second sentence of draft article 1 should be deleted. Reasons given in support of deletion of the sentence included: that the model statutory provisions should specify the cases in which they would apply, and for that purpose draft article 2 (a), defining "data record" or "data message", should be sufficient; that a negative definition of the scope of application of the model statutory provisions, such as the exclusion of written or documentary information, might be confusing, since it would not be clear whether only written or documentary information, or other information as well, would be excluded; that such a negative definition of the scope of application might be inappropriate, since it might have the adverse effect of excluding certain kinds of information in written or documentary form, such as telegrams and telecopies, which should not be excluded.

Third sentence

31. Differing views were expressed as to whether the third sentence of draft article 1 ("Except as otherwise provided in these Rules, they do not apply to the substance of the information") should be retained.

32. One view was that the sentence should be retained since it provided a useful rule of interpretation under which the burden of proof that the rules applied to the substance of a given information would be on the person raising such an argument. Another view was that the sentence should be retained, but slightly modified by replacing the word "substance", which was not sufficiently clear, by "contents" or by "rights and obligations arising from the underlying transaction". Yet another view was that the sentence should be rephrased to define the sphere of application in a positive manner.

33. The prevailing view, however, was that the sentence should be deleted. In support of deletion, it was stated that the sentence was superfluous, since the principle that the model statutory provisions would not apply to the rights and obligations arising from the underlying transaction was self-evident. However, it was also stated by proponents of deletion that there were cases in which the model statutory provisions would apply to matters of substance of the information (e.g., draft article 12 dealing with the formation of contracts) and that the matter should be dealt with in each relevant article rather than in a general article defining the sphere of application of the model statutory provisions. It was also stated that whether the model statutory provisions applied to the substance of the underlying transaction was a matter to be determined by other applicable rules of national law, since there might be cases in which the trier of fact would have to consider the substance of the information in order to determine whether the model statutory provisions would apply.

Footnote to chapter I

34. The Working Group considered the question whether the issue of the relationship of the model statutory provisions to consumer protection law should be dealt with in a footnote or in the text of the model uniform provisions.

35. The view was expressed that dealing with the matter in a footnote was not appropriate. It was stated that, in a number of countries, footnotes to statutory texts were not used and the legal effect of such a footnote would be uncertain. It was thus suggested that the matter should

be dealt with in the text of draft article 1 proper. It was also stated that the need to define the notion of "consumer" could be circumvented through the use of wording based on article 2(a) of the United Nations Convention on Contracts for the International Sale of Goods, which provided that the Convention did not apply to "sales of goods bought for personal, family or household use". In this context, a rule along the following lines was suggested: "Personal or household matters are out of the scope of application of the model statutory rules."

36. In response, it was recalled that, at its previous sessions, the Working Group had decided that the issue should be dealt with in a footnote, in particular since it would be impractical to attempt to provide a uniform definition of the notion of "consumer" (see A/CN.9/387, para. 28 and A/CN.9/373, para. 32). In support of that approach, it was stated that issues of consumer protection should, to the widest possible extent, be left to national legislators. Moreover, it was pointed out that if the matter were to be dealt with in the text of the model statutory provisions, a rule setting the priority between the model statutory provisions and consumer protection law would have to be added. After discussion, the Working Group reaffirmed its previous decision that the issue of consumer protection law should be dealt with in a footnote.

37. As to the precise approach to be followed with regard to consumer matters, four variants were before the Working Group. Variant A stated that the model statutory provisions did not deal with issues related to consumer protection. Variant B stated the principle that the model statutory provisions did not override law intended for the protection of consumers. Variant C was based on a twofold approach, i.e., the model statutory provisions would not apply to consumer transactions and they would be subject to consumer protection law. Variant D was based on the principle that the model statutory provisions would not apply to consumer transactions.

38. The view was expressed that the matter of consumer protection should be dealt with along the lines of variant D so as to exclude the application of the model statutory provisions to consumer transactions. In support of that view, it was stated that the term "consumer transactions" was a clear and objective criterion, while the notion of "consumer protection" might be unclear and raise difficulties. Such difficulties might arise particularly if a determination had to be made as to what constituted consumer protection legislation. Examples were given of possible conflict between the model statutory provisions and otherwise applicable rules of law which, although not expressly mentioning consumer protection as their purpose, could be interpreted as having a protective effect on consumers. For example, it was stated that protection-of-data-privacy law was, in a sense, consumer protection law, and yet should not be covered by the model statutory provisions.

39. The prevailing view, however, was that variant D should be rejected. The Working Group reaffirmed the decision made at its nineteenth session that the model statutory provisions should apply to all messages, including messages to or from consumers, but that it should be made clear that the model statutory provisions were not intended to override any consumer protection law (see A/CN.9/373, paras. 29-31).

40. The Working Group then focused its attention on variant B. Variant B was criticized on the ground that it might necessitate a determination as to whether a particular law was intended for the protection of consumers, which might be a difficult matter of interpretation of the law. In addition, it was stated that variant B might be misinterpreted as subjecting commercial law to

consumer law. It was thus suggested that, should the variant be retained, it should be placed within brackets. The prevailing view, however, was in favour of the adoption of variant B, which was said to establish appropriate recognition of the principle that consumers could benefit from the application of the model statutory provisions, while it left open the possibility for legislators to provide special protection to consumers.

Footnote to article 1

41. The view was expressed that the model statutory provisions should apply only to international cases since their purpose was to facilitate international trade. It was stated that such a limitation in scope would be consistent with the general mandate of the Commission with respect to international trade. The contrary view was that the application of the model statutory provisions should not be limited to international cases. In support of that view, it was pointed out that legal certainty to be provided by the model statutory provisions was necessary for both domestic and international trade. Furthermore, a duality of regimes governing the use of electronic means of recording and communication of data might create a serious obstacle to the use of such means.

42. After discussion, the Working Group reaffirmed the decision made at its previous session, that the model statutory provisions should be applicable in principle to both international and domestic cases, but that a footnote should indicate a possible test of internationality for use by those States that might desire to limit the applicability of the uniform rules to international cases (A/CN.9/387, para. 21).

43. With respect to the text of the footnote, a number of improvements of a drafting nature were suggested. It was stated that the notion of "international trade interests" was too broad and potentially confusing since it might be interpreted as dealing indifferently with the interests of Governments and with the interests of commercial partners in the field of international trade. It was thus suggested that the text should refer to "international trade" or to "international trading interests". There was general agreement that the matter would need to be discussed by a drafting group, to be established by the Working Group at a future session.

Article 2. Definitions

44. The Working Group decided that its method of working with regard to draft article 2 at the current session would be to engage in an exchange of views on the definitions contained therein, but to generally reserve final decisions until it had completed its review of the draft model statutory provisions as a whole.

Subparagraph (a) (Definition of "Data [record] [message]")

45. The Working Group noted that the text of the subparagraph reflected the decisions that had been made at the previous session (A/CN.9/387, paras. 30-39). It then proceeded to consider further various elements of the definition, largely from the standpoint of drafting.

46. The view was expressed that the word "data", irrespective of whether it was paired with

"record" or "message", was not clear, since it might be interpreted in either of two ways: as a reference to any information in a computer, or as a reference to information fields in EDI messages. As an alternative, an expression along the following lines was suggested: "'electronic record' means information as data or messages ...". The use of the word "electronic", it was said, would not necessarily be interpreted as barring future, non-electronic media. It was stated in response that the word "data" and the term "data record" had a specific, commonly understood connotation in practice. In response to a suggestion to use the term "electronic document", it was recalled that the Working Group had previously shied away from using the word "document" because it might connote a link to paper. Yet another suggestion was to forgo in the term selected words such as "electronic", in which there might appear to be an inherent reference to the media, and to include as an essential element in the definition the notion of digital creation, storage and communication of information.

47. Another portion of the definition focused on by the Working Group was the reference to creation, storage and communication of information. A suggestion was made that communication or transmission should be a required element, a view that, as in the past, did not attract support. As regards the reference to creation of information, the concern was expressed that that wording, in particular if read in conjunction with draft article 12(2), could be read as suggesting the possibility that contracts could be concluded in the total absence of human intervention. Another concern with the word "created" was that it might suggest the possibility of purely oral communications. An amendment proposed in line with those views was the use of the word "recorded" in place of the word "created".

48. While recognizing the concern that had been raised with respect to such a possible interpretation of the word "created", there was broad agreement that the definition needed to take into account the fact that industry was increasingly relying on interactive, computer-to-computer communications with little or no human intervention, in which software programs permitted computers to make decisions within limited parameters (e.g., computerized inventory control triggering computer-generated re-ordering when inventory stocks diminished). It was understood that, standing at the back of such purely computer-generated communications, there were persons, either physical or juridical, that remained ultimately responsible for the legal consequences of the communications. Another drafting suggestion was to replace "created" by "generated".

49. Differing views were exchanged as to the choice to be made by the Working Group between the terms "data record" and "data message". Related concerns were raised with respect to both terms. On the one hand, the concern was expressed that the word "message" might suggest the exclusion of data that was merely stored, while on the other hand the word "record" might be read as excluding data that was communicated. It was suggested that the term "data statement" might be a collective term that would encompass both stored and communicated data. The concern raised in turn by that proposal was that the word "statement" might connote a link to paper and might also suggest the exclusion of computer-generated data interchange. After deliberation, the Working Group decided, at least for the time being, to retain the term "data record", which was understood to encompass the case of computer-generated messages.

50. Differing views were also expressed as to whether to retain the reference to telegramme, telex and telecopy. One view was that those forms of communication should be deleted from

the definition. Reasons cited in support of deletion centred on the differences between those forms of communication and EDI, which included, aside from technological factors, the fact that established legal approaches existed for dealing with communications by telegramme and telex, if not by telecopy, which might, however, be understood legally as a combination of mail and photocopying.

51. The prevailing view was to affirm the earlier decision in favour of a broad approach to media of communication and to retain in the definition a reference to telegramme, telex and telecopy. The Working Group as well did not accept a suggestion to refer only to telex and telegramme, and to delete mention of telecopy. It was noted in the discussion that the technological distinction between EDI and those media of communication was blurring as they themselves increasingly relied on technologies that provided a recording capability. To that it might be added that a data transaction might involve several types of media. A view was also expressed that, were the definition to contain a requirement of digitalization, uncertainty as to the inclusion of telegramme, telex and telecopy could be met. Other suggestions directed at the media of communication included: to include a reference to electronic mail; to avoid excluding the practice of issuance of a telegramme on the basis of oral transmission by telephone to the intermediary of the contents of the telegramme; and to forgo the use of the word "analogous", since that word might inadvertently suggest a link to analog technology.

Subparagraph (b) (Definition of "Electronic data interchange (EDI)")

52. The Working Group found the substance of the subparagraph to be generally acceptable. It was noted that, in the preparation of a revised draft, it might be useful to consider any definition of "EDI" that might be adopted by the Economic Commission for Europe (ECE) in the context of UN/EDIFACT.

Subparagraph (c) (Definition of "[Sender] [Originator]")

53. The Working Group noted that the text of the subparagraph reflected decisions that had been made at the previous session (A/CN.9/387, paras. 43-46). It then proceeded to consider further various elements of the definition, largely from the standpoint of drafting.

54. As regards the choice between the words "sender" and "originator", support was expressed in favour of each of these words. It was widely felt, however, that the word "originator" would be more in line with the decision to use the word "record" in subparagraph (a). It was stated that the word "originator" was commonly used in practice in the context of communication or transmission of information.

55. It was widely felt that, since a definition of "intermediary" was contained in subparagraph (e), the words "other than one performing the function of an intermediary" should be replaced by the words "other than an intermediary".

56. Several concerns were expressed with respect to the words "any person on whose behalf a data [record] [message] covered by these Rules purports to have been created, stored or communicated". One concern was that the expression "any person" was too broad and should be replaced by "a person" to avoid covering persons other than originators. Another concern was that the words "on whose behalf" might be interpreted as excluding the originator itself.

While it was suggested that the text should be redrafted to cover expressly the originator and any other person acting on its behalf, it was widely felt that the text was sufficiently clear to avoid misinterpretation. It was further suggested that the words "covered by these Rules" were redundant, since a definition of "data record" was contained in subparagraph (a). There was general agreement for the deletion of those words.

57. With respect to the notion of "person" used in the draft definition, a concern was expressed that the mere reference to "person" might not make it sufficiently clear that any legal person or entity on behalf of which a message was created was to be regarded as a sender. In particular, it was stated that messages that were generated automatically by computers without direct human intervention should be clearly regarded as "sent" by the legal entity on behalf of which the computer was operated. As regards such situations where messages were automatically generated, it was also stated that a special provision would be needed to deal with the issue of intent to send a message in such cases. It was further stated that the reference to the person who originated a message might be misinterpreted as covering any clerk who processed the data. Suggestions that were made to replace the words "any person" or "a person" included "a natural or legal person"; "a person or entity"; "a party"; and "anyone". A further suggestion was to introduce, either in the text of the model statutory provisions or in a footnote, a definition of the notion of "person".

58. In response to those suggestions and concerns, it was recalled that the same discussion had taken place at the previous session of the Working Group (A/CN.9/387, para. 44). It was noted that the notion of "person" had been used in previous UNCITRAL texts, apparently without giving rise to difficulties. It was also noted that, should the model statutory provisions deviate from the use of the notion of "person" or introduce a definition of the notion of "person", difficulties might arise with respect to the interpretation of other UNCITRAL texts. The view was expressed that, in most legal systems, the notion of "person" was used to designate the subjects of rights and obligations and was consistently interpreted as covering both natural persons and corporate bodies. The view was also expressed that, should the notion of "entity" be used, the text should make it clear that it was not intended to establish any computer as the subject of rights and obligations. While support was expressed in favour of using the notion of "party", which was said to be sufficiently neutral, that notion was also objected to on the ground that it pertained to the contractual sphere.

Subparagraph (d) (Definition of "Addressee")

59. Doubts were raised as to the need for including the subparagraph on the grounds that "addressee" was a "natural" term, i.e., a term with a meaning that would be obvious from the context in which it was used, rather than a special term of art that required definition in the model statutory provisions. It was suggested that the only function apparently served by the definition was to exclude intermediaries from the notion of "addressee". That blanket exclusion was questioned on the ground that there might be instances in which an intermediary would be an addressee, for example, when it was acting in a representational capacity with respect to an end user. In support of retaining subparagraph (d), it was pointed out that "addressee" was an important term, as evidenced by its repeated use throughout the model statutory provisions.

60. Various observations and views were expressed aimed at modification or refinement of subparagraph (d), were it to be retained. Those observations included the following: the words

"other than one performing the function of an intermediary" were not clear and might lend themselves to circumvention; those words might therefore be deleted, in particular if, in subparagraph (e), wording were used along the lines of "any person that provides the service"; the expression "any person" was too broad, since persons other than addressees might be involved, a concern that might be met by saying instead "the person" or "a person"; the term "end user" might be too narrow, since it would not be the concern of the law whether the addressee actually made use of a data record; the word "ultimately" should be deleted since it might exclude the possibility of addressees in the middle of the message-transmission chain; this provision might be one instance in which the term "data message" would have been a term preferable to "data record", in view of the focus on data transmission in the current provision; the words "covered by these rules" were unnecessary since all "data records", as a defined term, were covered.

Subparagraph (e) (Definition of "Intermediary")

61. The view was expressed that it might not be necessary to retain a definition of "intermediary". However, the focus of most interventions was on modification of the provision. A concern with the first sentence, in connection with a concern raised with regard to subparagraph (d) (see above, para. 60), was that the expression "as an ordinary part of its business" might lend itself to circumvention. It was suggested that the expression should be deleted, or, in the alternative, replaced by the expression "on behalf of a person". Another suggestion to ease this concern in subparagraph (e), as well as in (c) and (d), was to focus in those provisions on the rights and obligations with regard to a particular message.

62. Views were also exchanged as to the second sentence of subparagraph (e), which set forth a non-exhaustive list of value-added services that might be provided by an intermediary. A number of interventions questioned the need for that sentence on the ground that the value-added services referred to therein were outside the message-transmission chain and therefore did not involve rights and obligations of concern to the model statutory provisions. The proper scope of the text, it was stated, should be the rights and obligations related to the transmission function of the intermediary. It was also suggested that the sentence contained what appeared to be a substantive rule and as such did not belong in a definition. Support was expressed, however, for the retention of the second sentence, on the ground that such value-added services performed an increasingly important commercial function and should be recognized. The view was also expressed that in such a case the nature of the intermediary as a service provider should be made clearer, in addition to making it clearer that the list of possible services in the definition was non-exhaustive.

Subparagraph (f) (Definition of "Record")

63. Doubts were expressed as to the necessity or advisability of including a definition of "record" in view of the definition in subparagraph (a) of the term "data record". In addition to the concern over possible overlap and confusion with subparagraph (a), the concern was raised that the reference to a form requirement in the definition would overlap and possibly conflict with draft article 6.

64. Concerning the two variants of subparagraph (f) before the Working Group, a view was expressed that variant A appeared to be more complicated than variant B, and that therefore the

latter was preferable. As to the formulation of variant B, concerns included the applicability of the word "representation" to what was in effect a collection of electronic impulses and the clarity of the reference to "reproduction" of the record. An alternative formulation for the definition, focusing on the elements of durability and form, was proposed: "... a durable representation of information either in or capable of being converted into a perceivable form". The concern was again expressed, however, that such a definition might overlap with draft article 6.

65. The Working Group concluded its deliberations on draft article 2 by noting that, in addition to the decisions that had been taken, a number of drafting suggestions that had been made could be taken into consideration in the preparation of a revised draft of the model statutory provisions.

Article 3. Interpretation of the Uniform Rules

Paragraph (1)

66. It was noted that paragraph (1) contained an interpretation rule, modelled on article 7(1) of the United Nations Sales Convention, emphasizing the importance of the international character of the model statutory provisions and the need to promote uniformity in their application and the observance of good faith. Differing views were expressed as to whether the provision should be retained. One view was that, while such a provision might be useful in the context of an international convention, it might be irrelevant in the context of statutory provisions that would eventually be enacted as pieces of national legislation. It was stated that paragraph (1) only related to the interpretation of the model statutory provisions, but it would be the national law enacting the model statutory provisions, not the model statutory provisions themselves, which would be interpreted by the national courts, so paragraph (1) would simply not apply. It was pointed out that for this reason no such interpretation rule had been included in the model laws prepared thus far by UNCITRAL.

67. The prevailing view, however, was that paragraph (1) should be retained. It was stated that a provision along the lines of paragraph (1) would enhance unification and harmonization of law, since it could provide useful guidance to national courts and other authorities. It was stated that in certain countries, more particularly in federal States, it was not uncommon for model rules to provide such guidance, which was aimed at limiting the extent to which a uniform text, once incorporated in local legislation, would be interpreted only by reference to the concepts of local law. It was also stated that in some jurisdictions, it was recognized that national laws could be subject to a different set of interpretation rules, depending on whether they were of domestic or of international origin, for example if they originated from organs of regional economic integration organizations. It was added that it was consistent with the practice followed in contemporary international legal instruments to include such a rule aimed at the harmonization or uniform interpretation of national laws.

68. A number of drafting changes were suggested. As the model statutory provisions applied to both national and international cases, there was a need to limit the application of this provision in the case of purely domestic transactions. The suggestion was therefore made that the words "where appropriate" should be inserted before the words "to their international

character". Another suggestion was that the reference to international trade should be deleted, since good faith had the same meaning both in domestic and in international trade. Yet another suggestion was that the notion of the international character and the need to promote uniformity were two different goals that should be expressed in separate paragraphs, so as to avoid confusion.

69. The view was expressed that one of the purposes of the model statutory provisions would be seen as encouraging the use of new communication technologies. The suggestion was thus made that a new paragraph should be inserted between the current paragraphs (1) and (2) along the following lines: "Regard is also to be had to the purpose of these rules to enhance trade through transactions utilizing modern commercial methods." That suggestion was objected to on the ground that it could be seen as mandating the use of electronic communications, while the intention of the Working Group was merely to remove obstacles in the use of such communications. The objection was also raised that the word "modern" was not appropriate, since today's "modern" technologies would eventually become outdated.

Paragraph (2)

70. It was noted that paragraph (2), which was modelled on article 7(2) of the United Nations Sales Convention, provided that lacunae left by the model statutory provisions were to be covered by application of the general principles enshrined in the statutory provisions or, in the absence of such principles, of the law applicable by virtue of the rules of private international law.

71. Differing views were expressed as to whether the paragraph should be deleted, or retained and possibly modified. In favour of deletion of the paragraph, it was stated that it was inappropriate to include a reference to "the general principles on which these Rules are based" in the model statutory provisions, since it was not clear what principles were being referred to. It was also stated that a reference to the law applicable by virtue of the rules of private international law was irrelevant, since the only law applicable would be that of the State enacting the model statutory provisions.

72. However, there was general agreement in the Working Group that, although paragraph (2) needed to be modified, a rule along those lines was useful and should be included in the model statutory provisions. As regards that modification, it was recalled that, at its previous session, the Working Group was agreed that the reference to "the law applicable by virtue of the rules of private international law" should be maintained only if the model statutory provisions were eventually adopted in the form of an international convention (see A/CN.9/387, para. 56). Accordingly, in view of its decision to use the form of a model law, the Working Group decided that the reference to the rules of private international law should be deleted.

73. Several suggestions were made to improve the formulation of paragraph (2), including the following: to place the paragraph in a separate article, since it did not establish a rule of interpretation of the model statutory provisions, or to amend the title of draft article 3 so as to correspond with its contents; to clarify the term "settled", since it was not clear whether the general principles or the applicable law would govern a matter that was not "settled" at all in the model statutory provisions or was "settled" only partially; to recast paragraph (2) so as to incorporate some of the ideas contained in the new paragraph proposed for insertion between

the current paragraphs (1) and (2) (see above, para. 69), along the following lines: "In the interpretation of the model statutory provisions regard is to be had to their purpose of giving effect to principles formulated internationally intended to facilitate the use of modern methods of communicating and holding information and the need to promote uniformity in the application of these principles." The Working Group noted the above suggestions as possible items to be considered in the preparation of a revised draft of the model statutory provisions.

Article 4. [Deleted]

[Article 5. Variation by agreement]

74. There was general support for the principle of party autonomy, on which draft article 5 was based. Differing views were expressed, however, as to how the principle should be implemented in the model statutory provisions. Under one view, which supported the wording of the draft article, the emphasis should be placed on the general principle of party autonomy, which should prevail unless otherwise expressly stated by the model statutory provisions. In the same vein, it was suggested that, with a view to simplifying and clarifying the expression of the general principle, the text should be replaced by a provision along the following lines: "These Rules may be varied by agreement."

75. According to another view, certain difficulties might arise if the principle of party autonomy was broadly stated along the lines of draft article 5. It was stated that, as had already been pointed out at the previous session of the Working Group (A/CN.9/387, para. 64), the model statutory provisions might, to some extent, be regarded as a collection of exceptions to well-established rules regarding the form of legal transactions. It was recalled that such well-established rules were normally of a mandatory nature since they generally reflected decisions of public policy. A concern was thus expressed that an unqualified statement regarding the freedom of parties to derogate from the model statutory provisions might be misinterpreted as allowing parties, through a derogation to the model statutory provisions, to derogate from mandatory rules adopted for public policy reasons. It was thus suggested that, at least in respect of the provisions contained in chapter II and in draft article 14, the model statutory provisions should be regarded as stating the minimum acceptable form requirement and should, for that reason, be regarded as mandatory, unless they expressly stated otherwise.

76. Another suggestion, which received considerable support, was that draft article 5 should be moved to chapter III. There was general agreement that chapter III dealt mostly with rights and obligations that should be maintained within the sphere of party autonomy. With respect to chapter II, it was stated that a general reference to party autonomy might not be needed, since draft articles 6, 7 and 8 expressly dealt with situations where agreements were concluded between parties. However, the view was expressed that, in the context of draft article 9, a provision on party autonomy might be needed to validate agreements by parties on the means of evidence that they would use for the purposes of their contractual relationships.

77. Several suggestions were made with respect to the formulation of draft article 5. It was suggested that party autonomy should apply not only in the context of relationships between originators and addressees of data records but also in the context of relationships involving

intermediaries. Another suggestion was that the text should expressly limit party autonomy to rights and obligations arising "as between the contracting parties" so as not to suggest any implication as to the rights and obligations of third parties.

78. After discussion, the Working Group decided that the current text of draft article 5 should be retained, subject to drafting improvements, and that each article of the model statutory provisions should be discussed with a view to determining whether parties should be allowed to derogate from its provisions. It was agreed that, once the review of the remaining articles of the model statutory provisions had been completed, the Working Group would revert to draft article 5 and decide whether it was possible to consolidate in a single article dealing with party autonomy all exceptions to the mandatory nature of the model statutory provisions. The Working Group also postponed its final decision as to whether draft article 5 should be moved to chapter III.

CHAPTER II. FORM REQUIREMENTS

Article 5 bis

79. It was recalled that the Working Group, at its previous session, had agreed that the model statutory rules should contain a broad provision stating that trade data records should not be denied legal recognition solely as a result of their electronic form (A/CN.9/387, para. 94). It was noted that, in the current text of draft article 5 bis, the word "solely" had been omitted in view of concerns that had been expressed at the previous session of the Working Group that the use of such words as "solely" or "on the sole grounds" might raise uncertainty as to whether an objection to a trade data message could be characterized as being made on the grounds that the message was in electronic form and not on other grounds (see A/CN.9/387, paras. 102 and 148).

80. Various concerns were expressed with regard to draft article 5 bis. One concern was that the draft article was too broadly worded and that it might produce the unintended effect that information in the form of a data record would have to be recognized as having legal validity irrespective of whether a contract stipulated that written documents should be used. Another such unintended effect might be to validate the use of electronic means of recording information in cases where a statutory regime prescribed the use of a writing, for example, in the case of cheques, bills of exchange and various kinds of documents that would embody title to goods or other proprietary rights.

81. Another concern was that draft article 5 bis might contradict draft articles 6, 7 and 8. It was stated that, while the purpose of those draft articles was to allow for certain existing requirements to be removed under strictly controlled conditions, draft article 5 bis might be interpreted as doing away with such requirements without establishing any condition regarding the use of data records.

82. Various suggestions were made to narrow the scope of draft article 5 bis. One suggestion was to limit the scope of the draft article to the contractual sphere and to provide expressly that parties could deviate from its provisions. Another suggestion was to limit the scope of draft article 5 bis to the areas covered by draft articles 6, 7 and 8 and to provide express reference to

the conditions set forth in those articles. In that connection, several changes in drafting or structure were proposed. One proposal was that draft article 5 bis should be drafted in the form of a positive rule as an introduction to draft articles 6, 7 and 8. Another proposal was that draft article 5 bis should be combined with draft articles 6 and 8 in a single provision establishing the legal validity of data records if certain conditions were met regarding the quality and security of the recording process. Yet another proposal was that article 5 bis should be redrafted along the following lines: "A data record may only be denied legal effectiveness, validity or enforceability on the grounds that the information it contains is required to be recorded in writing or presented in its original form if the conditions in article 6 or article 8 (as the case may be) are not satisfied."

83. Further suggestions were made regarding the scope of draft article 5 bis. One suggestion was to exclude expressly certain instruments, such as cheques and documents of title. Another suggestion was that the scope of the draft article should be limited to the sphere of admissibility of evidence. In that connection, it was proposed that draft article 5 bis should be combined with draft article 9 to indicate that, for evidence purposes, the reliability of a data record should not be in question unless the party that objected to the admissibility of a data record established that there were reasonable grounds to consider that the data record might not be reliable.

84. In response to the above-mentioned concerns and suggestions, it was recalled that the purpose of the draft article was only to reflect the general principle agreed upon by the Working Group at its previous session (see above, para.79). It was stated that the effect of the draft article should not be to solve any evidentiary issue or to establish the legal validity of any data record but merely to ensure that such validity could not be denied for the only reason that the data record was in electronic form. It was also stated that the effect of draft article 5 bis should not be to allow the substitution of a data record for any formal element that might be required under a specific legal regime. There was general agreement that, for example, cheques in an electronic form could not be validly presented for payment.

85. After discussion, the Working Group reaffirmed its decision that the model statutory provisions should establish as a principle that data records should not be rejected simply because of their form. It was widely felt that such a principle should apply generally. The scope of the draft article should therefore not be limited to the area of evidence or to other issues dealt with under draft articles 6 to 9.

86. It was generally felt, however, that article 5 bis needed to be redrafted to express more clearly the principle on which it was based. In that connection, it was suggested that the draft article should contain the opening words "For the purpose of any rule of law" and that a reference to the "sole grounds" should be introduced in the current text. Another suggestion was that the draft article should read as follows: "A data record shall not be denied legal effectiveness, validity or enforceability on the sole grounds that it is recorded in electronic form." Further suggestions were made to replace the words "on the grounds that the information it contains must be recorded in [written] [documentary] form or presented in its original form" by the words "on the sole grounds that it is in a form covered by these Rules" or "on the sole ground that it was not stored or communicated in paper form". Yet another suggestion was that the draft article should read as follows: "Information shall not be denied legal effectiveness, validity or enforceability solely on the grounds that it is recorded as a data record."

87. After discussion, the Working Group decided that draft article 5 bis should read along the following lines: "Information shall not be denied legal effectiveness, validity or enforceability solely on the grounds that it is recorded as a data record."

Article 6. Functional equivalent of "writing"

Title

88. The view was expressed that the meaning of the term "functional equivalent" was not clear, in particular since the term was used only in the title, and that a different formulation should be sought. Suggestions for reformulation of the title included "form", "functional requirement of writing", and "concept of writing", none of which attracted sufficient support. At the same time, the Working Group was urged, in formulating the title and content of draft article 6, not to shy away from the use of terms that were widely known and understood in the EDI field.

Paragraph (1)

89. As to the choice between variants A and B, the Working Group was generally of the view that variant A was preferable. A view had been expressed, however, that variant B was preferable because the expressions used in variant B, in particular "displayed" and "immediately accessible" were more objective and ascertainable than the corresponding terms in variant A, "visible and intelligible". A concern had also been expressed as to the appropriateness of the expression "predicated upon the existence of a writing" in variant A, since the crux of the matter was the case in which a statute would have consequences if information was not in writing.

90. Having settled on variant A, the Working Group engaged in a discussion of various suggestions for developing its content and formulation. As had been the case in the discussion of draft article 6 at the previous session (A/CN.9/387, paras. 66-80), the view was expressed that the conditions for the acceptability of a data record as a replacement for a writing should include a reference to the integrity or reliability of the data record, apart from or instead of the evidential rules set forth in draft article 9. It was stated that a data record could not be considered a true "equivalent" of writing and that the additional conditions were therefore needed to provide security. It was also stated that, in a number of countries, where existing legislation required the presentation of a writing, a data record could only be regarded as satisfying such a requirement if: the data record constituted a "record" under the definition suggested in article 2(f); there existed assurance as to the integrity of that record; and the data record was intelligible and accessible. It was suggested that such an added layer of conditions of acceptability, beyond those contained in paragraphs (1)(a) and (b) of variant A, were needed to take account of constraints in the infrastructure and technology of EDI and related means, illustrated in particular by cases ranging from telecopies to instruments such as securities, cheques, negotiable documents of title, property deeds and even simple deposit tickets. A concern was also expressed as to opposability of data records to third parties.

91. Formulations that were suggested for use as additional conditions, in addition to "integrity" or "reliability", included: faithfulness of the data record in reflecting what was

actually exchanged; authenticity and security against falsification; and durability. A structural suggestion in line with this approach was to combine article 6 with article 8, in which variant A of paragraph (1)(b) referred to the integrity of information presented in the form of a data record. Suggestions designed to soften the impact of the additional conditions on the use of EDI included: to establish a rebuttable presumption of the reliability of data records; the application of standards such as "commercial reasonableness" or "as appropriate in the circumstances"; a reference to "minimal security"; and consistency in tests for reliability in articles 6, 7 and 8.

92. In response to the view that reference should be made to the integrity or reliability of the data record, it was recalled that the Working Group had discussed the matter extensively at the previous session and that it had been recognized that the question of integrity or reliability was a matter that went mainly to the evidential value or weight of the data record, a matter dealt with in draft article 9 and beyond the scope of draft article 6, which was limited to defining what might be considered the equivalent of a writing. The view was stressed that the determination of evidential value was a matter that should be left to the trier of fact so as to ensure that evidence that might be necessary would not be prevented from being presented. It was also pointed out that the concerns that had been raised with respect to integrity and reliability of information in an EDI environment were relevant also to writings but that such additional conditions being suggested were not applied to paper-based writing, except in the context of evaluating evidential weight. Such an approach, it was warned, would impede rather than facilitate use of EDI and other emerging technologies in the conduct of international trade. In particular, it was pointed out that additional requirements such as those suggested above (see paras. 90-91) would impede EDI by imposing a greater burden on data records than on routine paper writings, which were accepted as presented.

93. As regards the instances of potential difficulty cited above (see para. 90), it was explained that there too questions were being raised that were intended to be dealt with elsewhere in the model statutory provisions: telecopies could be considered as copies, which would meet a test for writing, but beyond that, would have to meet the requirements for functional equivalency with an original, a matter dealt with in draft article 8; the questions raised with respect to securities, cheques and other instruments mentioned would also fall under that rule since they were instruments that traditionally had to be presented not only in written form, but also as originals. It was also pointed out that enacting States would have the option under paragraph (2) to make exclusions from the application of draft article 6. It was further noted that an express limitation on the opposability of data records to third parties was not merited, since non-opposability to third parties was a general principle of law that applied to writings as well.

94. Differing views were expressed as to whether to retain the reference in the chapeau of variant A to "custom or practice". The Working Group was urged to delete that reference so as to exclude from the scope of the rule in draft article 6 writing requirements derived from rules of custom or practice. It was stated that such requirements would, in most instances, be regarded as contractual in nature and be subject to contrary agreement of the parties. It was also stated that exclusion of such requirements would not preclude enacting States from taking account of the particular needs of practice, as well as of differences in circumstances and understanding in different countries. Support for retention of the reference was expressed on the ground that the application of draft article 6 to statutory writing requirements rules indicated

that it would be appropriate to apply the draft article also to writing requirements derived from rules of custom or practice. After deliberation, it was decided to delete the reference to rules of custom or practice. Concerns were also expressed as to the words "any rule of law", which might, for example, have the effect of application of draft article 6 to administrative requirements. Suggestions to meet that concern included to use an expression along the lines of "the law requires", or to limit the reference to rules of trade law.

95. Upon concluding its deliberations on draft article 6, and pending possible further deliberations at a later stage, following the review in particular of draft article 9, the Working Group agreed that the next draft of paragraph (1) would be based on variant A, subject to the deletion of the reference to rules of custom or practice. It was also agreed that, to address concerns that had been raised, the words "visible and intelligible" would be replaced by the word "durable", in square brackets.

Paragraph (2)

96. The Working Group decided to postpone its consideration of paragraph (2) of draft articles 6, 7 and 8 until it had completed its review of the other provisions of those articles (see below, paras. 128-133).

Article 7. Functional equivalent of "signature"

Paragraph (1)

Chapeau

97. There was general agreement with the thrust of the chapeau. A proposal was made to delete the words "custom or practice". In support of deletion, it was stated that the reference to "custom or practice" was superfluous since custom and practice were sources of law and, as such, were implicit in the words "any rule of law". It was added that to the extent that "custom or practice" were not recognized as sources of law, they would be beyond the scope of application of the model statutory rules. After discussion, the Working Group decided that the reference to "custom or practice" in the chapeau should be deleted.

98. With respect to the use of the words "expressly or impliedly", it was stated that, while requirements for signatures would most often be express, there existed a need to cover more explicitly the situation where a rule of law, while not expressly requiring a signature, provided for certain consequences if a signature was not presented. There was general agreement that the text should be made clearer in that respect.

99. As a matter of drafting, a few suggestions were made. One suggestion was to replace the words "requires information to be signed" by words such as "requires a signature" or "requires a document to be signed". Another suggestion was to insert after the word "satisfied" the words "in relation to a data record".

Subparagraph (a)

100. Differing views were expressed as to whether subparagraph (a) should be retained or deleted. In support of deletion, it was stated that requirements for signature, which were usually set by national mandatory rules of law, should not be made subject to alteration by agreement of the parties. In accordance with that view, draft article 5, recognizing party autonomy should be moved from chapter I to chapter III, so that it would not apply to chapter II (see above, paras. 76 and 78).

101. In support of subparagraph (a), it was stated that, from the standpoint of practice in high-speed, high-volume transactions, it would be important to recognize the freedom of parties to agree on the level and type of authentication method. In addition, it was pointed out that subparagraph (a) was not intended to alter requirements set by mandatory rules of law but merely to permit parties to agree on a particular authentication method in cases in which the law required a "signature" without mandating a specific authentication method. In that regard, it was stated that, even if subparagraph (a) had the unintended effect of altering statutory requirements for signature, it could not affect third parties. Moreover, it was said that, in cases where the rule contained in subparagraph (a) might conflict with a national mandatory rule of law, its application could be excluded by virtue of paragraph (2). Apart from retention of subparagraph (a), proposed methods of implementing in the model statutory provisions a rule recognizing party autonomy with respect to signature included: keeping draft article 5 in chapter I or recognizing party autonomy in subparagraphs (b) or (c), or devising a default rule that would cover cases where there was no rule of law and no agreement of the parties requiring signature. After discussion, the Working Group decided to retain subparagraph (a) within brackets.

102. A related question was raised that subparagraph (a) in its current formulation might not sufficiently cover system rules, i.e., rules that were implemented in third-party service agreements. In that regard it was suggested that system rules should be dealt with in the context of draft article 5 dealing with party autonomy in general. Another suggestion was that the issues of system rules as well as trading partner agreements might be usefully explained in a guide to enactment of the model statutory provisions.

Subparagraphs (b) and (c)

103. There was general agreement in the Working Group on the principles embodied in subparagraphs (b) and (c). It was noted that subparagraphs (b) and (c) recognized the dual function of a signature to identify the originator and to confirm that the originator approved the content of a data record. The Working Group then turned to the question of the formulation of subparagraphs (b) and (c).

"method [of authentication]"

104. The Working Group discussed whether the words "of authentication" that appeared within brackets in subparagraph (b) should be retained or deleted. In support of deletion, it was stated that the term "authentication" was inappropriate, since it might be misinterpreted as suggesting a reference to notarization of documents. Another objection to the notion of authentication was that, while it might be a term of art in the context of certain EDI techniques, it might be

meaningless or unclear in the context of other techniques. Moreover, it was stated that "authentication" meant nothing more than a method of identifying the originator of a data record and of establishing the originator's approval of the contents of the data record. For that reason, it was stated that use of the term would add nothing to the existing language of subparagraph (b). It was suggested that the words "method of authentication" should be replaced by the word "procedure".

105. In support of retention of the words "method of authentication", it was stated that the notion of "authentication" was used in EDI as well as in non-EDI communications and that its meaning was well established in both types of situations. It was recognized, however, that it might be useful to include in the model statutory provisions a definition of authentication. In that regard, a definition along the following lines was suggested: "authentication means a process providing certainty on the identity of the originator of a data record". Another suggestion was to use the following wording: "authentication is proof of identification or the process by which claimed identity is verified". With respect to the suggested wording, it was stated that, at least in the context of EDI, the notion of authentication might be used to refer both to the identification of the sender and to the integrity of the content of a data record. After discussion, the Working Group decided to retain the reference to authentication within brackets.

"created or communicated"

106. The suggestion was made that, in view of the decision that the model statutory provisions should apply to "data records", irrespective of whether such "records" were intended or not to be communicated, the formulation of subparagraph (b) might need to be reconsidered. A suggestion was made to replace the words "the data [record] was created or communicated" by the words "a data statement is made". Another suggestion was to refer to the identity of the originator and its intention that the data record be transmitted". In addition, the concern was expressed that the word "person", following the words "created or communicated", was not clear. The Working Group requested the Secretariat to redraft that part of subparagraph (b) taking into account the suggestions made.

"technically appropriate"

107. The Working Group considered the question whether the term "technically" that appeared within brackets in subparagraph (c) should be deleted or whether the term "technically appropriate" should be replaced by the term "commercially reasonable". In support of deletion, it was stated that the term was unnecessary, in the light of the reference to a method as reliable as appropriate in view of all circumstances. In addition, it was pointed out that use of that term had the effect of overemphasizing technical considerations at the expense of other substantive considerations, such as the economic value of the transaction involved. On the other hand, it was stated that it might be more appropriate to require that the method of authentication should be "commercially reasonable". It was added that the words "commercially reasonable", used also in the context of the UNCITRAL Model Law on International Credit Transfers, introduced a well-known objective criterion on the basis of which the reliability of an authentication method could be assessed. While interest was expressed in the addition of the term "commercially reasonable", the use of the term was objected to on the ground of considerations raised at the previous session of the Working Group (see A/CN.9/387, para. 85). After

discussion, the Working Group decided to delete the term "technically", without reaching a final resolution of whether to include a reference to commercial reasonableness.

"including [any agreement between the [sender] [originator] and the addressee of the data [record] [message] and any relevant commercial usage]"

108. It was stated that it was inappropriate to list factors on the basis of which the reliability of a method of authentication could be assessed. In support of deletion of the corresponding wording at the end of subparagraph (b), it was pointed out that such listing of factors might appear to be exhaustive, while other factors might be relevant in assessing the reliability of an authentication method, e.g., availability of alternative methods of authentication, or the value and the importance of the transaction involved. The view was expressed, however, that the reference to any agreement between the parties should be retained in draft article 7 or, if that reference were deleted from draft article 7, that draft article 5 should remain in chapter I so that the model statutory provisions would recognize the freedom of the parties to choose an authentication method (see above, paras. 76 and 78). After discussion, the Working Group decided that the reference to agreement of the parties should be maintained within brackets for further consideration at a later stage and that the words "and any relevant commercial usage" should be deleted.

Paragraph (2)

109. The Working Group decided to postpone its consideration of paragraph (2) of draft articles 6, 7 and 8 until it had completed its review of the other provisions of those articles (see below, paras. 128-133).

Article 8. Functional equivalent of "original"

General remarks

110. Differing views were expressed as to whether draft article 8 should be retained. In support of deletion, it was stated that it was impossible to speak of "original" data records, since if "original" were defined as a medium on which information was fixed for the first time, the addressee of a data record would always receive a copy thereof. Another view was that a rule along the lines of draft article 8 was useful but that it should be put in a different context. In support of that view, it was pointed out that the notion of "original" should be dealt with in draft article 6, since usually an "original" was meant whenever the law required a writing (see above, para. 90). Moreover, it was stated that the notion of "original" could be dealt with in draft article 9, since it was useful for purposes of admissibility of evidence and evidential weight, which were dealt with in that draft article.

111. The prevailing view, however, was that draft article 8 should be retained. A number of reasons were given in support of its retention. One reason was that the draft article was essential since in practice many disputes related to the question of originality of documents and in electronic commerce the requirement for presentation of originals constituted one of the main obstacles that the model statutory rules should try to remove. Another reason was that a rule along the lines of draft article 8 could be useful in granting the legal recognition of original

documents to certain data records, such as invoices which were in the form of printouts and could not have the appearance of originality that, for example, bills of lading had. Yet another reason was that draft article 8 was necessary since, although in some jurisdictions an "original" was meant whenever a "writing" was required, the model statutory provisions dealt with "writing", "signature" and "original" in draft articles 6, 7 and 8 respectively as separate concepts. Yet another reason was that draft article 8 was useful in clarifying the notions of "writing" and "original", in particular in view of their importance for purposes of evidence.

112. The Working Group recalled that, at its previous session, it had been felt that draft article 8 might be pertinent to documents of title and negotiable instruments, in which the notion of uniqueness of an original was particularly relevant (see A/CN.9/387, paras. 91-97). In line with the decision taken by the Working Group in the consideration of draft article 1, it was clarified that the model statutory provisions were not intended to apply to documents of title and negotiable instruments, or to such areas of law where special requirements existed with respect to registration or notarization of writings, e.g., family matters or the sale of real estate. In that regard, a note of caution was struck that draft article 8 could provide guidance as to the meaning of "original" in the context of party autonomy but should avoid defining "original" for the purposes of national mandatory law, in the context of which an original could be required for a number of considerations that went beyond the scope of application of the model statutory rules.

Paragraph (1)

Opening words

"any rule of law"

113. At the outset, the Working Group recalled that the focus of the draft article should be on providing a substitute for requirements that stemmed from existing rules of law regarding the use of originals. The focus of the draft article should not be on contractual requirements or on requirements that were rooted in custom or practice.

114. A concern was expressed that the words "any rule of law" might be interpreted as making draft article 8 applicable to administrative requirements. Suggestions to meet that concern included: to use an expression such as "the law requires", or to limit the scope of the draft article to the area of trade law. It was recalled, however, that the Working Group, under draft article 1, had decided that administrative requirements, while not constituting the focus of the model statutory provisions, should not be excluded from their scope. After discussion, the Working Group adopted the words "a rule of law".

"custom or practice"

115. The view was expressed that, in line with the decision made in the context of draft articles 6 and 7, the reference to custom or practice should be deleted. It was stated that, in many countries, requirements of custom or practice would be considered either as contractual in nature, e.g., where rules of custom or practice were incorporated expressly or impliedly by parties in their trading terms and conditions, or as a rule of law, e.g., where certain usages would be recognized as sources of law by regulatory authorities or by case-law.

116. In response, it was pointed out that often it was not only rules of law but also practice or custom that required information to be presented in original form. For example, it was stated that, in certain countries, customs and practices of port authorities would have a legal value of their own, in the absence of contractual or statutory rules, and that such rules of custom might constitute considerable obstacles to the use of EDI, which the model statutory provisions should attempt to overcome.

117. After discussion, the Working Group decided, in line with its decision to focus on statutory requirements in the context of draft article 8, to delete the reference to custom or practice from the paragraph. However, it was felt that the situations where obstacles to EDI arose from rules of custom or practice regarding the use of originals might need to be reconsidered after the entire draft article had been reviewed. The Working Group took note of a suggestion that a separate rule might need to be devised in the context of a separate article or in the context of article 9 (see below, paras. 134-138).

"expressly or impliedly"

118. It was stated that, while requirements for originals would most often be express, there existed a need to cover more explicitly the situation where a rule of law, while not expressly requiring the use of an original, provided for certain consequences if an original was not presented. There was general agreement that the text should be made clearer in that respect.

"in its original form"

119. It was suggested that the words "in its original form" should be replaced by the words "with its original contents". That suggestion was objected to on the ground that, in practice, disputes arose with regard to both the form and the content of information.

Subparagraph (a)

120. The view was expressed that subparagraph (a) was needed to establish the principle of party autonomy with respect to original requirements. The prevailing view, however, was that there existed no need for an express provision validating private agreements in the absence of mandatory requirements of law, i.e., in the absence of legal obstacles to the use of EDI. It was also recalled that the appropriate focus for draft article 8, and for chapter II in general, was on mandatory requirements of law, not on contractual matters, which should be dealt with separately, under draft article 5 or in the context of chapter III (see above, paras. 76 and 78).

121. Divergent views were expressed as to how the statutory rule established in draft article 8 would interplay with the principle of party autonomy. Under one view, draft article 8 should be regarded as stating the minimum acceptable form requirement to be met by a data record for it to be regarded as the functional equivalent of an original. It was stated that parties should not be free to derogate from the provisions of draft article 8, for the same reasons that they would not be free to derogate from existing mandatory rules which would be replaced by draft article 8 (see above, para. 75). It was thus suggested that subparagraph (a) should be deleted. Another view was that the statutory provisions contained in draft article 8, and in chapter II in general, should be used to promote the use of agreed procedures between parties. It was thus suggested that the agreement of the parties should be the foremost element in the definition of a

functional equivalent of "original" and that subparagraph (a) should be maintained. It was generally recognized, however, that, even if contractual stipulations were to be regarded under subparagraph (a) as an element of the statutory definition of the functional equivalent of "original", the principle of privity of contract would limit the ambit of such stipulations, which could not affect the rights and obligations of third parties. It was thus recognized that, in all likelihood, retention or deletion of subparagraph (a) would not result in significantly different situations in practice. After discussion, the Working Group decided to delete subparagraph (a).

Variants A and B

122. Support was expressed in favour of both variants. In favour of variant A, it was said that it established a clearer and simpler test. It was stated that variant A had the advantage of emphasizing the importance of the integrity of the information for its originality. However, it was suggested that the notion of "integrity" might need to be further clarified in the provision. It was suggested that the following references should be built into the text of variant A as elements to be considered when assessing integrity: systematic recording of the information, assurance that the information was recorded without lacunae and protection of the data against alteration. Another suggestion was that the notion of integrity should be clarified by including a reference to the notion of "record", which had been considered under draft article 1.

123. In favour of variant B, it was said that it had the advantage of linking the concept of originality to a method of authentication and that it appropriately put the focus on the method of authentication to be followed in order to meet the requirement. It also was said to provide appropriate flexibility by establishing that, in each given case, the reliability of the method of authentication would be assessed with regard to circumstances. In was stated that a reference to non-alteration might be more explicit than the notion of integrity, which was said to be unclear, in particular as to whether it related to integrity of the data or integrity of the support on which the data were affixed. However, the reference to the notion of "authentication" in variant B was objected to for reasons already expressed in the context of the discussion on draft article 7 (see above, paras. 104-105).

124. It was widely felt that variants A and B should be combined and that the resulting text should contain the following elements: a simple criterion such as integrity; a description of the elements to be taken into account in assessing the integrity; and an element of flexibility, e.g., a reference to circumstances.

125. A suggestion was made that, rather than trying to define originality of data records on the basis of paper-based considerations, draft article 8 should focus on how to satisfy requirements for originals, since data records in fact would never be the equivalent of paper documents. In that connection, the suggestion was made that language along the following lines could be used:

> "Where a rule of law requires an original, a data record shall be considered as satisfying that requirement when:
>
> "(a) the data record constitutes a 'record' under article 2 (f); and
>
> "(b) the integrity of the record has been preserved."

It was stated that consideration might be given to adding two other optional requirements to the notion of originality of data records, i.e., uniqueness of the data record, and authentication along the lines of variant B.

126. Another suggestion was that the notion of originality should be linked with the possibility for the data record to be displayed. It was also suggested that the provision should contain a reference to the notion that original information should have remained unaltered between the time of its original recording and the time when it was displayed. A wording along the following lines was suggested:

> "Where law requires information to be presented in the form of an original record or provides for certain consequences if it is not, that requirement shall be satisfied in relation to information contained in a data record if:
>
> "(a) that information is displayed to the person to whom it is to be presented; and
>
> "(b) there exists a reliable assurance as to the integrity of the information between the time it was recorded and the time it is displayed."

The reference to the information being "displayed" was objected to on the ground that it might establish a subjective criterion, which might be met or not, depending upon the will of the addressee. In response to that concern, it was suggested that the word "displayed" could be replaced by the following: "displayed in a form which enables it to be accessible for the purpose of reference as it would have been if it had been recorded in an original record".

127. After discussion, the Working Group agreed that paragraph (1) should be revised along the following lines:

> "(1) Where a rule of law requires information to be presented in the form of an original record, or provides for certain consequences if it is not, that requirement shall be satisfied in relation to a data [record] containing the requisite information if:
>
> "(a) that information is displayed to the person to whom it is to be presented; and
>
> "(b) there exists a reliable assurance as to the integrity of the information between the time the originator first composed the information in its final form, as a data [record] or as a record of any other kind, and the time that the information is displayed.
>
> "(2) Where any question is raised as to whether paragraph (1)(b) is satisfied:
>
> "(a) the criteria for assessing integrity are whether the information has remained complete and, apart from the addition of any endorsement, unaltered; and
>
> "(b) the standard of reliability required is to be assessed in the light of the purpose for which the relevant record was made and all the circumstances."

Paragraph (2)

128. Various views were expressed as to paragraph (2), which provided that an enacting State might wish to exclude the application of draft article 8 from situations to be specified by it. Many remarks were made in the discussion directed not only at draft article 8(2), but also at the analogous provisions found in draft articles 6(2) and 7(2) (see above, paras. 96 and 109).

129. One category of views was that paragraph (2) should specifically exclude certain types of situations, depending in particular on the purpose of the formal requirement in question. One such type of situation was said to be the case of writing requirements intended to provide notice or warning of specific factual or legal risks, for example, requirements for warnings to be placed on certain types of products. A formulation along the following lines was proposed to embody that approach: "The provisions of this article do not apply if 'writing' is required by law in order to give notice to the sender or the addressee in regard to factual or legal risks."

130. Other cases suggested for specific exclusion were negotiable instruments, documents of title and formalities required pursuant to international treaty obligations of the enacting State (e.g., the requirement that a cheque be in writing pursuant to the Convention providing a Uniform Law for Cheques, Geneva, 1931). It was suggested in the light of those cases that the current formulation was unclear since it might suggest a choice for the enacting State with respect to requirements that in fact had to be applied pursuant to existing international obligations of the enacting State.

131. A differing view was that, on a variety of grounds and notwithstanding the concerns that had been raised, it was not necessary or appropriate to provide for exclusions as in paragraph (2) and its sister provisions in draft articles 6 and 7. As to the proposal to specifically exclude requirements with a warning purpose, it was suggested that the purpose of statutory requirements would often be unclear, thereby enhancing the possibility that a purpose-related test could be used to circumvent the model statutory provisions. It was also suggested that the provisions dealing with matters such as warning requirements were a distinct area of the law not likely to be confused with the limited purpose and subject-matter of the model statutory provisions.

132. Opposition was also expressed to exclusion in paragraph (2) of negotiable instruments and documents of title. It was said that this would raise needless obstacles to the development of EDI, since what the model statutory provisions contained were very fundamental principles and approaches that were likely, to one degree or another, to find application in those cases. It was suggested that the concern with negotiable instruments, securities and the like should not be exaggerated since it would be obvious that the model statutory provisions were not meant to be a full set of structured, operational rules of the type required for such instruments. The concern was also raised that a blanket exclusion would not only needlessly prejudge questions that the Working Group was likely to take up in the near future, but also fail to take account of developments in practice. In that connection, it was reported that EDI was being used, for example, for certain types of negotiable warehouse receipts. It was stated that, should the Working Group wish to exclude any kind of situation or any area of law from the scope of draft articles 6, 7 and 8, it should focus on those kinds of situations and areas of law that were beyond the power of the enacting State to change by means of a statute.

133. The prevailing view was that paragraph (2), as its sister provisions in draft articles 6 and 7, should remain essentially in its current form, which did not recommend any specific exclusions, but merely indicated that there was a choice for enacting States to make. Such an approach, it was said, would recognize that the matter of specifying exclusions should be left to enacting States, an approach that would take better account of differences in national circumstances. It would also avoid the risk that a listing of exclusions in the model statutory provisions might err, on the side either of inclusion or exclusion. In response to a suggestion that it might be appropriate to introduce a footnote drawing the attention of legislators to certain areas of the law or certain types of situations that might be excluded from the scope of the model statutory provisions, it was widely felt that the matter would more appropriately be dealt with in a guide to enactment of the model statutory provisions, which might be prepared at a later stage.

Suggested "default rule"

134. At the close of the discussion on draft article 8, it was suggested that a rule might be considered for inclusion in the model statutory provisions establishing the functional equivalent of "original" in the case where no requirement of either contract or statutory law was applicable in that respect. It was stated that, in addition to dealing with custom and practice (see above, paras. 115-117), such a rule would have the advantage of providing a default rule to supplement the terms of agreements in cases of gaps or omissions in contractual stipulations, e.g., interchange agreements or "system rules". Doubts were expressed as to whether it would be appropriate to attempt to regulate custom or practice by way of a statutory instrument. However, considerable interest was expressed in the possibility of preparing a default rule to supplement contracts.

135. The following formulation was suggested for possible inclusion as a separate paragraph of draft article 8 or as a separate article:

> "In the absence of any express or implied agreement and any rule of law requiring the information to be in the form of an original document, information in the form of a data [record] shall be accorded equal weight to information of article 8(1)(b)."

136. Another formulation was proposed, based on a negative wording, which was proposed for inclusion in draft article 9:

> "In the absence of any express or implied agreement and any rule of law requiring the information to be in the form of an original document, in any legal proceedings, information in the form of a data [record] shall not be accorded any less weight [solely] on the grounds that it is not contained in an original document if article 8(1)(b) is satisfied."

137. Both proposals were objected to on the grounds that they provided rules to assess the evidential weight of data records. It was stated that nothing in the model statutory provisions should limit the authority of courts to decide on the evidential weight to be given to information presented in paperless form. In response, it was stated that one of the purposes of the model statutory provisions was to enhance certainty, which might include providing guidance to the trier of facts. It was noted that the effect of the suggested wordings would not be to modify the

principle embodied in draft article 9(2) that information provided in the form of a data [record] would be given "due evidential weight".

138. After discussion, the Working Group agreed that the possible preparation of a "default rule" needed further consideration. The Secretariat was requested to consider the preparation of a draft provision reflecting the above discussion.

Article 9. Admissibility and evidential value of data records

139. There was general agreement in the Working Group on the principles stated in draft article 9. However, differing opinions were expressed as to the best manner in which those principles could be formulated.

140. One view was that the draft article should be deleted and the basic criteria for the admissibility of data records should instead be included in draft article 6. It was stated that draft articles 9 and 6 dealt with the same issue, i.e., the basic criteria to be met for data records to be treated in the same manner as writings. As to other elements of draft article 9, the suggestion was made that they should be deleted: subparagraph (a) of paragraph (1) because it duplicated the principle expressed in draft article 5 bis that data records should not be denied legal value on the sole ground that they were in electronic form; the term "best evidence" in subparagraph (b) of paragraph (1) because it was, in some jurisdictions, meaningless; paragraph (2) because stating that data records would be given due evidential weight would be stating the obvious. It was suggested that the various factors listed in the second sentence of paragraph (2) would be more appropriate in a commentary than in the text of the model statutory provisions.

141. The prevailing view, however, was that draft article 9 should be retained. It was stated that paragraph (1), establishing that data records should not be denied admissibility as evidence in legal proceedings on the sole ground that they were in electronic form, put appropriate emphasis on the general principle stated in draft article 5 bis and was needed to make it expressly applicable to admissibility of evidence, an area in which particularly complex issues might arise in certain jurisdictions. In addition, it was generally felt that paragraph (2), which provided useful guidance as to how the evidential value of data records should be assessed (e.g., depending on whether they were created, stored or communicated in a reliable manner) might be seen as introducing an appropriate qualification of the principle enshrined in paragraph (1).

142. As to the precise formulation of draft article 9, a number of suggestions were made. One suggestion was that paragraph (1) should be recast in a positive way. It was stated that the purpose of that paragraph was to eliminate barriers to the admissibility of data records in legal proceedings and that that purpose might be better served if the principle were expressed through a positive formulation. Another suggestion was that the term "solely" in subparagraphs (a) and (b) should be deleted, since in the case of an objection to admission of data records it might be difficult to determine whether the objection was on the ground that the record was in electronic form or whether other grounds were involved. Yet another suggestion was that appropriate language should be added at the end of the second sentence of paragraph (2) so as to make it clearer that the assessment of the evidential weight of data records could be based on

any other factor not listed in paragraph (2). As to the suggestion to delete the reference to the "best evidence" rule, the Working Group agreed that the reference should be maintained. It was recognized that the term "best evidence" was a term understood in and necessary for common law jurisdictions. In addition, it was pointed out that States in which the term was meaningless could adopt the model statutory rules without the reference to the "best evidence" rule.

143. After discussion, the Working Group adopted the text of draft article 9, subject to drafting improvements. It was agreed that words along the lines of "and any other relevant factor" should be added at the end of paragraph (2). It was also agreed that the word "solely" should be deleted from subparagraphs (a) and (b) of paragraph (1).

CHAPTER III. COMMUNICATION OF DATA [RECORDS] [MESSAGES]

Article 10. Effectiveness of data [records] [messages]

144. In view of the fact that only a limited time remained at the current session, the Working Group engaged only in a general review of the draft of article 10, which implemented the decisions taken at the twenty-seventh session (A/CN.9/387, paras. 110-132).

145. It was noted that draft article 10, in line with the intended scope of chapter III, dealt with the effects of the communication of data records and that it did not focus on the creation or maintenance of data records. It was suggested that the title of draft article 10 should reflect this by referring to communication of data records. Other suggestions that were made with respect to the title of draft article 10 included: "obligations binding on the originator of a trade data record" and "right to repudiate data records".

146. With regard to paragraph (1), a number of suggestions were made. One suggestion was that the word "issued" should be replaced by the word "transmitted" since it was not clear whether a data record was "issued" at the time it was created or at the time it was communicated. Another suggestion was that the opening words of paragraph (2), "As between the [sender] [originator] and the addressee," should be inserted at the beginning of paragraph (1), since the communication of a data record should produce effects only between the sender and the recipient and not against third parties. Yet another suggestion was that the reference to amendment or revocation should be deleted. In support of that suggestion, it was stated that, while such reference was meaningful in article 5 of the UNCITRAL Model Law on International Credit Transfers dealing with payment orders and their revocation or amendment, on which draft article 10 had been modelled, it was unnecessary in draft article 10. It was explained that a revocation or amendment of a data record made by electronic means would be a data record covered by the model statutory provisions, while a revocation or amendment of a data record made by other means should fall outside the scope of the model statutory provisions.

147. A concern was expressed that the words "is deemed to have approved the content" in paragraphs (1), (3) and (5) might overly burden the originator. It was stated that, if a data record was issued by the originator, or on its behalf, those words created an irrebuttable presumption that the originator approved the content of the record as received. In order to

avoid that unfair result, the suggestion was made that the words "is deemed to have approved" should be replaced by the words "is presumed to have approved". Moreover, it was felt that the presumption should not refer to approval of the "content" of a data record but to approval of its "sending" by the originator.

148. The suggestion was objected to on the ground that such an irrebuttable presumption was consistent with the purpose of the model statutory rules, since trading partners could be discouraged from using electronic means of communications if the recipient could not rely on the data record as received. In addition, the suggestion was objected to on the ground that an irrebuttable presumption would cause no problems since, if there was an error in the data record as received, it would be covered by paragraph (5) or the national applicable law of mistake. Moreover, it was recalled that the words "is deemed to have approved" originated from the UNCITRAL Model Law on International Credit Transfers and that at its previous session the Working Group agreed that the model statutory provisions should use, to the extent appropriate, language that was consistent with the language of the Model Law. However, a view was that the words "is deemed to have approved" should not be interpreted as establishing an irrebuttable presumption, since paragraph (5) provided that the presumption would not apply in case of error.

149. With a view to addressing the various views and concerns that had been expressed, a proposal was made that paragraph (1) should be reformulated so as to create an irrebuttable presumption as to whether the sender who had signed the data record would be deemed as having approved the sending of the data record, and a rebuttable presumption as to whether the sender would be deemed as having approved the content of the data record. Some support was expressed in favour of that proposal.

150. Although it was generally agreed that paragraphs (1), (2) and (3) were useful, it was suggested that they needed to be simplified. It was stated that those paragraphs should focus on the attribution of a data record to the originator, in the case where the data record was actually transmitted by the originator itself, or through an agent, or in the case where the addressee properly applied a reasonable method of authentication that had previously been agreed upon with the originator. With regard to paragraphs (2) and (3)(b), the concern was expressed that the meaning of the "verification" referred to therein was not clear. With regard to paragraph (3)(b), the concern was expressed that, in the current formulation, the originator could be bound merely because the addressee verified the authentication by a reasonable method, even in the absence of any previous relationship with the addressee. As to paragraph (4), a concern was expressed that it might allow the party with the stronger bargaining power to impose on the weaker party an unreasonable authentication method. It was suggested that paragraph (4) should be deleted.

151. Differing views were expressed as to whether paragraph (5) should be retained. In support of retention, it was stated that the paragraph was useful in providing some protection to the originator in case of errors in the transmission of a data record. In support of deletion, it was suggested that paragraph (5) was unnecessary since it essentially dealt with the issue of mistake, which should be dealt with under other applicable law. It was also suggested that paragraph (5) should be redrafted in terms of a presumption.

152. As to paragraph (6), a number of concerns were raised. One concern was that

paragraph (6) could give the mistaken impression that data records might have no legal effect in themselves. Another concern was that paragraph (6) did not make it clear whether the legal effects related to the creation or the communication of a data record. It was suggested that paragraph (6) should be deleted, or if retained, that it should be modified.

153. After discussion, the Working Group requested the Secretariat to prepare a revised draft of article 10 taking into account the various views and concerns that had been expressed.

III. FUTURE WORK

154. The Working Group engaged in a preliminary exchange of views as to whether further legal issues relevant to the increased use of EDI and related means of data communication should be drawn to the attention of the Commission and considered for future work upon completion of the model statutory provisions.

155. The view was expressed that the legal aspects of negotiability or transferability of rights in goods in a computer-based environment were important issues to be considered in developing rules to facilitate the growth of world trade through electronic commerce. It was stated that such rules should focus on the following topics: the means to achieve legal recognition of agreements involving negotiability or transferability; the need for default standards for allocation of risks among the parties; the need for designated registries to maintain the integrity of the transfers. It was suggested that this project could focus on the preparation of a functional equivalent to a negotiable bill of lading or that it might explore the establishment of a new kind of document of title. Wide support was expressed in favour of that proposal.

156. Another view was expressed that it would be particularly appropriate to adopt a broader approach to the issues of transferability, with a view to involving not only transfer of rights in goods but also transfer of rights in securities such as stocks and shares. Some support was expressed in favour of that proposal. It was stated that many of the legal issues arising in the area of transferability of rights would in all likelihood be identical, irrespective of whether the rights transferred were in goods or in securities. It was pointed out, however, that securities markets were highly regulated at the national level. Moreover, it was stated that national systems for the exchange of dematerialized securities had been recently developed in many countries, or were currently being developed. It was stated that, for those reasons, it might be particularly difficult to achieve uniformity in that area.

157. The prevailing view was that it would be appropriate for the Commission to undertake the preparation of uniform law on the issue of negotiability in a computer-based environment. It was generally felt that such uniform law should not be limited in scope to transfer of rights in goods and that certain issues relevant to dematerialized securities might need to be taken into account. It was also felt that no attempt should be made, at the current stage, to develop a uniform regime for the exchange of securities at an international level. There was general agreement that the future project should give particular consideration to the use of registries and to the possibility of performing such functions as registration and transfer of rights at an international level.

158. After discussion, the Working Group adopted a recommendation to the Commission that it should authorize the Working Group to undertake preliminary work on this project as soon as it had completed the preparation of the model statutory provisions.

159. Another suggestion was that the Commission should consider the issue of liability of networks and, more generally, the legal issues arising in the context of the relationships between EDI users and service providers as possible work items. While some support was expressed in favour of the suggestion, it was felt that it might be premature to engage in work on such a topic at this stage.

160. Yet another suggestion was that the Commission should engage in the preparation of a model communication agreement for optional use between EDI users. It was recalled, however, that such standard communication agreements were currently being prepared by other organizations, particularly the European Communities and the Economic Commission for Europe. It was also recalled that the Commission, at its twenty-sixth session, had reaffirmed its earlier decision to postpone its consideration of the matter until the texts of model interchange agreements currently being prepared within those organizations were available for review by the Commission.

161. The Working Group decided, subject to approval by the Commission, that its twenty-eighth session would be held at Vienna, from 3 to 14 October 1994.

NOTES

[1] Official Records of the General Assembly, Forty-sixth Session, Supplement No. 17 (A/46/17), paras. 314-317.

[2] Ibid., Forty-seventh Session, Supplement No. 17 (A/47/17), paras. 140-148.

[3] Ibid., Forty-eighth Session, Supplement No. 17 (A/48/17), paras. 265-267.